

CONTROLLED PRESSURE FUEL NOZZLE SYSTEM

ABSTRACT

5 A multi-staged gas turbine engine fuel supply
system includes a plurality of fuel injectors and at
least first and second staged fuel injection circuits
in each of the fuel injectors. Each of the first and
second staged fuel injection circuits includes first
and second fuel injection points and at least first
and second fuel nozzle valves operable to open at
10 different first and second crack open pressures and
controllably connected to the first and second staged
fuel injection circuits, respectively. A single fuel
supply manifold is connected to all of the fuel
nozzle valves. A single fuel signal manifold is
15 controllably connected to all of the first and second
fuel nozzle valves. The fuel injector may have a
valve housing with one of the first fuel nozzle
valves and one of the second fuel nozzle valves
contained therein.